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Sequence Listing was accepted.

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Reviewer: Keisha Douglas

Timestamp: [year=2008; month=10; day=29; hr=10; min=3; sec=5; ms=356;]

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Application No: 10814850

Version No: 2.0

Input Set:

Output Set:

Started: 2008-10-01 10:25:34.271

Finished: 2008-10-01 10:25:35.247

Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 976 ms

Total Warnings: 12

Total Errors: 0

No. of SeqIDs Defined: 14

Actual SeqID Count: 14

Error code	Error Description
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SEQUENCE LISTING

<110> RAJAMOHAN, GOVINDAN
DAHIYA, MONIKA
PATHANIA, RANJANA
DIKSHIT, KANAK LATA

<120> A method for oxygen regulated production of recombinant staphylokinase

<130> U 015118-6

<140> 10814850
<141> 2004-03-31

<150> US 60/459,439
<151> 2003-04-01

<160> 14

<170> PatentIn version 3.3

<210> 1
<211> 161
<212> DNA
<213> Artificial Sequence

<220>
<223> A nucleotide sequence of expression cassette OXY-1

<400> 1
gatcaagctt atcatcgata agcttacagg acgctggggtt aaaagtatatt gagttttgat 60
gtggattaag ttttgagagg tcaataagat tataatatgt gatgcttcac aattctgatg 120
tatggcaaaa ccataataat gaacttaagg aagacctcat g 161

<210> 2
<211> 582
<212> DNA
<213> Artificial Sequence

<220>
<223> A modified staphylokinase SAK-2 gene

<220>
<221> CDS
<222> (16)..(408)

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (24)..(24)

<223> n is a, c, g, or t

<400> 2

gaacttaagc	atatg	gcn	gga	gcn	tat	aaa	aag	ggc	gat	gac	gcg	agt	tat	51		
		Ala	Gly	Ala	Tyr	Lys	Lys	Gly	Asp	Asp	Ala	Ser	Tyr			
		1				5					10					
ttt	gaa	cca	aca	ggc	ccg	tat	ttg	atg	gta	aat	gtg	act	gga	gtt	gat	99
Phe	Glu	Pro	Thr	Gly	Pro	Tyr	Leu	Met	Val	Asn	Val	Thr	Gly	Val	Asp	
	15						20					25				
ggg	aaa	gga	aat	gaa	ttg	cta	tcc	cct	cat	tat	gtc	gag	ttt	cct	att	147
Gly	Lys	Gly	Asn	Glu	Leu	Leu	Ser	Pro	His	Tyr	Val	Glu	Phe	Pro	Ile	
	30					35					40					
aaa	cct	ggg	act	aca	ctt	aca	aaa	gaa	aaa	att	gaa	tac	tat	gtc	gaa	195
Lys	Pro	Gly	Thr	Thr	Leu	Thr	Lys	Glu	Lys	Ile	Glu	Tyr	Tyr	Val	Glu	
45					50					55				60		
tgg	gca	tta	gat	gcg	aca	gca	tat	aaa	gag	ttt	aga	gta	gtt	gaa	tta	243
Trp	Ala	Leu	Asp	Ala	Thr	Ala	Tyr	Lys	Glu	Phe	Arg	Val	Val	Glu	Leu	
					65				70				75			
gat	cca	agc	gca	aag	atc	gaa	gtc	act	tat	tat	gat	aag	aat	aag	aaa	291
Asp	Pro	Ser	Ala	Lys	Ile	Glu	Val	Thr	Tyr	Tyr	Asp	Lys	Asn	Lys	Lys	
			80					85				90				
aaa	gaa	gaa	acg	aag	tct	ttc	cct	ata	aca	gaa	aaa	ggg	ttt	gtt	gtc	339
Lys	Glu	Glu	Thr	Lys	Ser	Phe	Pro	Ile	Thr	Glu	Lys	Gly	Phe	Val	Val	
	95						100					105				
cca	gat	tta	tca	gag	cat	att	aaa	aac	cct	gga	ttc	aac	tta	att	aca	387
Pro	Asp	Leu	Ser	Glu	His	Ile	Lys	Asn	Pro	Gly	Phe	Asn	Leu	Ile	Thr	
	110					115					120					
aag	gtt	gtt	ata	gaa	aag	aaa	taaaacaaaa	tagttgttta	ttatagaaag							438
Lys	Val	Val	Ile	Glu	Lys	Lys										
125						130										
taatgtcttg	attgaatatg	tgtagtgtgaaa	ttatcttttca	tcaaattctc	attcatgcac											498
gaatggttct	gccccaccta	atcagatatt	acgtgactta	tggggagaaa	tcagtttgga											558
taaaagtgga	ggatccagta	gccg														582

<210> 3

<211> 131

<212> PRT

<213> Artificial Sequence

<220>

<223> A peptide sequence of modified staphylokinase SAK-2 gene

<400> 3

Ala Gly Ala Tyr Lys Lys Gly Asp Asp Ala Ser Tyr Phe Glu Pro Thr
1 5 10 15

Gly Pro Tyr Leu Met Val Asn Val Thr Gly Val Asp Gly Lys Gly Asn
20 25 30

Glu Leu Leu Ser Pro His Tyr Val Glu Phe Pro Ile Lys Pro Gly Thr
35 40 45

Thr Leu Thr Lys Glu Lys Ile Glu Tyr Tyr Val Glu Trp Ala Leu Asp
50 55 60

Ala Thr Ala Tyr Lys Glu Phe Arg Val Val Glu Leu Asp Pro Ser Ala
65 70 75 80

Lys Ile Glu Val Thr Tyr Tyr Asp Lys Asn Lys Lys Lys Glu Glu Thr
85 90 95

Lys Ser Phe Pro Ile Thr Glu Lys Gly Phe Val Val Pro Asp Leu Ser
100 105 110

Glu His Ile Lys Asn Pro Gly Phe Asn Leu Ile Thr Lys Val Val Ile
115 120 125

Glu Lys Lys
130

<210> 4

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> A primer SAK-1 for amplification

<400> 4

gattgtagcc atatgtcaag ttcattcgac aaaggaa

37

<210> 5

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> An oligonucleotide primer SAK-2

<400> 5
 cggctactgg atcctccact tttatccaaa ctgattt 37

<210> 6
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> An oligonucleotide primer SAK-3

<400> 6
 gaacttaagg aagatataca tatgtcaagt tcattcgaca aagga 45

<210> 7
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> An oligonucleotide primer SAK-4

<400> 7
 gaacttaagg atatggctgg agcttataaa aagggc 36

<210> 8
 <211> 411
 <212> DNA
 <213> Staphylococcus aureus

<400> 8
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 acaggcccgt atttgatggt aaatgtgact ggagttgatg gtaaaggaaa tgaattgcta 120
 tcccctcatt atgtcgagtt tcctattaaa cctgggacta cacttacaaa agaaaaaatt 180
 gaatactatg tcgaatgggc attagatgcg acagcatata aagagtttag agtagttgaa 240
 ttagatccaa gcgcaaagat cgaagtcact tattatgata agaataagaa aaaagaagaa 300
 acgaagtctt tccctataac agaaaaaggt ttgtgtgtcc cagatttatc agagcatatt 360
 aaaaaccctg gattcaactt aattacaaag gttgttatag aaaagaaata a 411

<210> 9
 <211> 606
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A staphylokinas SAK gene with primer and terminator sequences

<400> 9
gaacttaagg aagatataca tatgtcaagt tcattcgaca aaggaaaata taaaaagggc 60
gatgacgcga gttattttga accaacaggc ccgtatttga tggtaaagt gactggagtt 120
gatggtaaag gaaatgaatt gctatccct cattatgtcg agtttcctat taaacctggg 180
actacactta caaaagaaaa aattgaatac tatgtcgaat gggcattaga tgcgacagca 240
tataaagagt ttagagtagt tgaattagat ccaagcgcaa agatcgaagt cacttattat 300
gataagaata agaaaaaaga agaaacgaag tctttcccta taacagaaaa aggttttggt 360
gtcccagatt tatcagagca tattaaaaac cctggattca acttaattac aaaggttggt 420
atagaaaaga aataaaacaa aatagttggt tattatagaa agtaatgtct tgattgaata 480
tgtgtagtga aattatcttt catcaaattc tcattcatgc acgaatgggt ctgccccacc 540
taatcagata ttacgtgact tatggggaga aatcagtttg gataaaagtg gaggatccag 600
tagccg 606

<210> 10
<211> 377
<212> PRT
<213> Staphylococcus aureus

<400> 10

Ser Glu Arg Ser Glu Arg Ser Glu Arg Pro His Glu Ala Ser Pro Leu
1 5 10 15

Tyr Ser Gly Leu Tyr Leu Tyr Ser Thr His Arg Leu Tyr Ser Leu Tyr
20 25 30

Ser Gly Leu Tyr Ala Ser Pro Ala Ser Pro Ala Leu Ala Ser Glu Arg
35 40 45

Thr Tyr Arg Pro His Glu Gly Leu Pro Arg Thr His Arg Gly Leu Tyr
50 55 60

Pro Arg Thr Tyr Arg Leu Glu Met Glu Thr Val Ala Leu Ala Ser Asn
65 70 75 80

Val Ala Leu Thr His Arg Gly Leu Tyr Val Ala Leu Ala Ser Pro Gly
85 90 95

Leu Tyr Leu Tyr Ser Gly Leu Tyr Ala Ser Asn Gly Leu Leu Glu Leu

100

105

110

Glu Ser Glu Arg Pro Arg His Ile Ser Thr Tyr Arg Val Ala Leu Gly
115 120 125

Leu Pro His Glu Pro Arg Ile Leu Glu Leu Tyr Ser Pro Arg Gly Leu
130 135 140

Tyr Thr His Arg Thr His Arg Leu Glu Thr His Arg Leu Tyr Ser Gly
145 150 155 160

Leu Leu Tyr Ser Ile Leu Glu Gly Leu Thr Tyr Arg Thr Tyr Arg Val
165 170 175

Ala Leu Gly Leu Thr Arg Pro Ala Leu Ala Leu Glu Ala Ser Pro Ala
180 185 190

Leu Ala Thr His Arg Ala Leu Ala Thr Tyr Arg Leu Tyr Ser Gly Leu
195 200 205

Pro His Glu Ala Arg Gly Val Ala Leu Val Ala Leu Gly Leu Leu Glu
210 215 220

Ala Leu Ala Pro Arg Ser Glu Arg Ala Leu Ala Leu Tyr Ser Ile Leu
225 230 235 240

Glu Gly Leu Val Ala Leu Thr His Arg Thr Tyr Arg Thr Tyr Arg Ala
245 250 255

Ser Pro Leu Tyr Ser Ala Ser Asn Leu Tyr Ser Leu Tyr Ser Gly Leu
260 265 270

Gly Leu Thr His Arg Thr His Arg Leu Tyr Ser Ser Glu Arg Pro His
275 280 285

Glu Pro Arg Ile Leu Glu Thr His Arg Gly Leu Leu Tyr Ser Gly Leu
290 295 300

Tyr Pro His Glu Val Ala Leu Val Ala Leu Pro Arg Ala Ser Pro Leu
305 310 315 320

Glu Ser Glu Arg Gly Leu His Ile Ser Ile Leu Glu Leu Tyr Ser Ala
325 330 335

Ser Asn Pro Arg Gly Leu Tyr Pro His Glu Ala Ser Asn Leu Glu Ile
340 345 350

Leu Glu Thr His Arg Leu Tyr Ser Val Ala Leu Val Ala Leu Ile Leu
355 360 365

Glu Gly Leu Leu Tyr Ser Leu Tyr Ser
370 375

<210> 11

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> An oligonucleotide PEC-1 for protein expression cassette

<400> 11

gatcaagctt atcatcgata agcttacagg acgctgggtt aaaagtatatt 50

<210> 12

<211> 55

<212> DNA

<213> Artificial Sequence

<220>

<223> An oligonucleotide PEC-2 for preparing protein expression
cassette

<400> 12

atcttattga cctctcaaaa cttaatccac atcaaaactc aaatactttt aacc 55

<210> 13

<211> 55

<212> DNA

<213> Artificial Sequence

<220>

<223> An oligonucleotide PEC-3 for preparing protein expression
cassette

<400> 13

agaggtcaat aagattataa tatgtgatgc ttcacaattc tgatgtatgg caaaa 55

<210> 14

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> An oligonucleotide PEC-4 for preparing protein expression
cassette

<400> 14

atgaggtctt ccttaagttc attattatgg ttttgccata catcagaatt

50